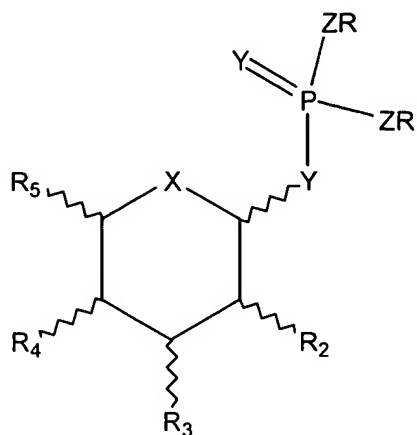


Clean Claims

1. **(previously presented)** A compound represented by structure 1:



1

wherein

X represents O;

Y represents independently for each occurrence O;

Z represents independently for each occurrence O;

R is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aralkyl, heteroaryl, and heteroaralkyl;

R' is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, acyl, and sulfonyl;

R₂, R₃, and R₄ are independently selected from the group consisting of R₆, -OR', -SR', -NR'₂, -OSO₃H, and -OPO₃H₂;

R₅ is selected from the group consisting of R₆, -(CR₂)_nOR', -(CR₂)_nSR', and -(CR₂)_nNR'₂;

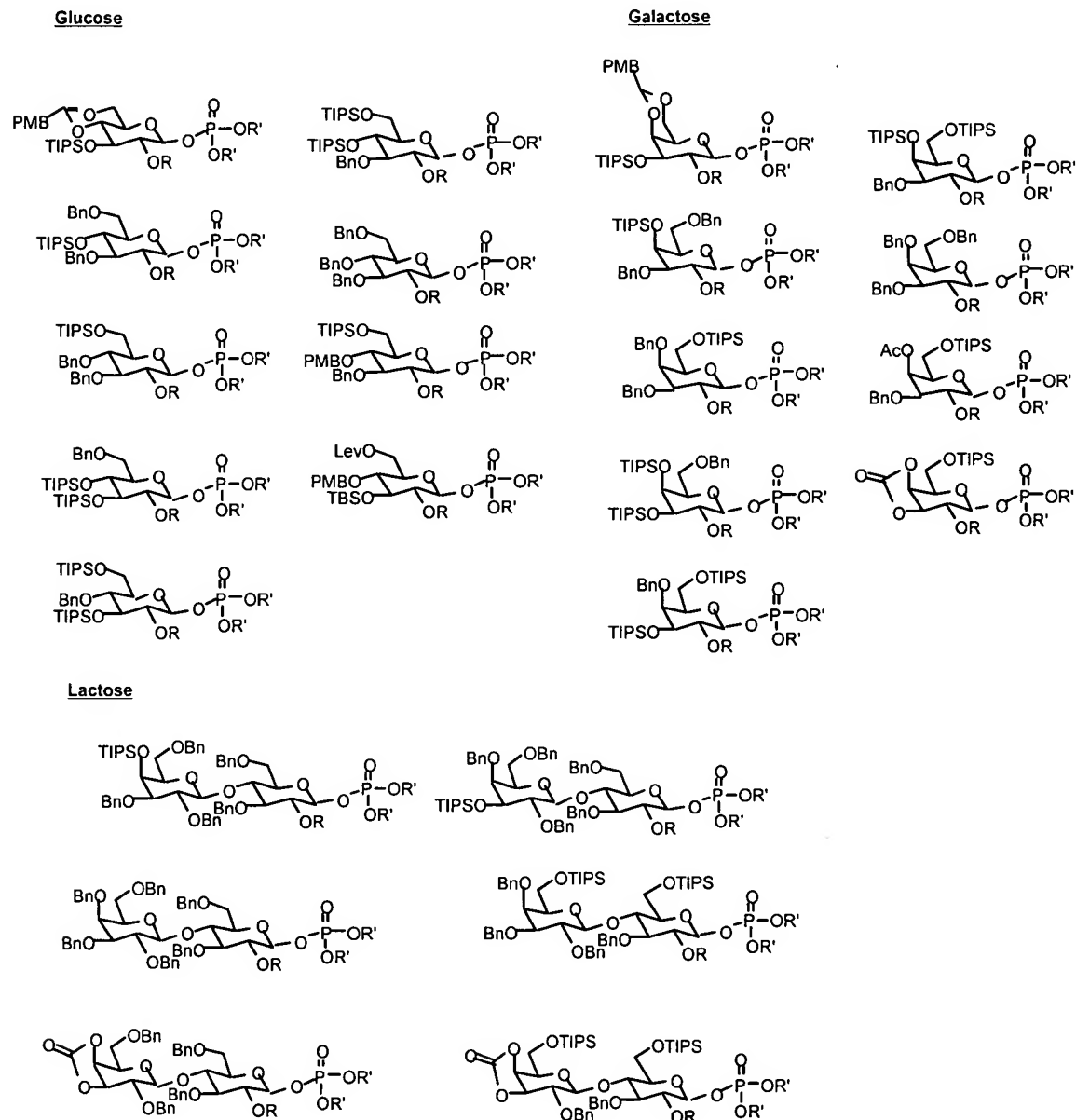
R₆ is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, and heteroaralkyl;

and

n is an integer selected from the range 0 to 10 inclusive.

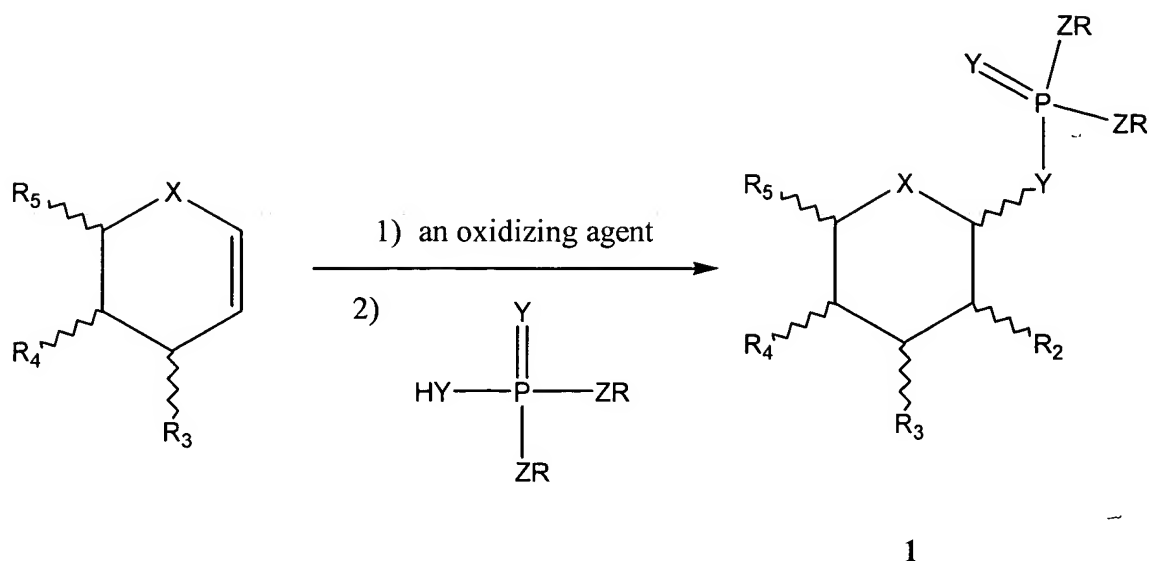
Claims 2-22. (canceled)

23. (original) The compound of claim 1, wherein said compound is represented by one of the following structures:



Claims 24-41. (canceled)

42. (previously presented) A method of synthesizing a compound represented by **1**, wherein said method is represented by the following scheme:



wherein

X represents O;

Y represents independently for each occurrence O;

Z represents independently for each occurrence O;

the oxidizing agent is selected from the group consisting of dioxiranes, percarboxylates, and persulfates;

R is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, and heteroaralkyl;

R' is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, acyl, and sulfonyl;

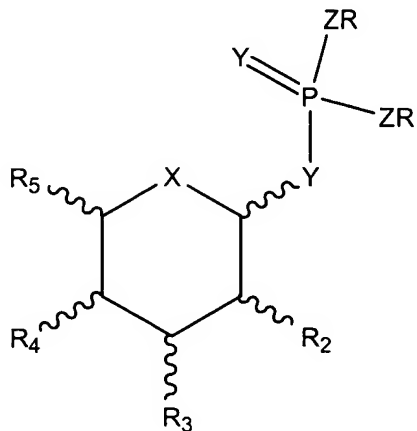
R₂ is OR';

R₃, and R₄ are independently selected from the group consisting of R, -OR', -SR', -NR'₂, -OSO₃H, and -OPO₃H₂;

R₅ is selected from the group consisting of R, -(CR₂)_nOR', -(CR₂)_nSR', and -(CR₂)_nNR'₂;
and

n is an integer selected from the range 0 to 10 inclusive.

43. **(original)** The method of claim 42, wherein the oxidizing agent is a dioxirane.
44. **(original)** The method of claim 43, wherein the oxidizing agent is dimethyl dioxirane (DMDO).
45. **(previously presented)** A compound represented by structure 2:



2

wherein

- X represents O;
- Y represents independently for each occurrence O;
- Z represents independently for each occurrence O;
- R represents independently for each occurrence aryl;
- R' is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, acyl, and sulfonyl;
- R₂ is selected from the group consisting of R₆, -OR', -SR', -NR'₂, -OSO₃H, -OPO₃H₂;
- R₃, and R₄ are independently selected from the group consisting of R₆, -OR₇, -SR', -NR'₂, -OSO₃H, and -OPO₃H₂;

R_5 is selected from the group consisting of R_6 , $-(CR_2)_nOR_7$, $-(CR_2)_nSR'$, and $-(CR_2)_nNR'_2$;

R_6 is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, and heteroaralkyl;

R_7 is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, heteroaryl, heteroaralkyl, and sulfonyl;

and

n is an integer selected from the range 0 to 10 inclusive.